

In the specification:

Please replace the paragraphs beginning on page 7, line 25 and ending on page 7, line 30 with the following amended paragraphs:

FIG. 12B is a magnified isometric view, showing details of a portion of FIG. 12A;

FIGS. 13A and 13B are views that are respectively similar to FIGS. 12A and 12B, but showing the substrate clamping mechanism of FIGS. 12A and 12B in a released (non-clamping) condition;

Please add the following paragraphs after the paragraph ending on page 7, line 30:

FIG. 14A is a cross sectional view of the substrate carrier of FIG. 1 wherein an alternative clamping member configuration is employed;

FIG. 14B is a magnified isometric view showing details of a portion of FIG. 14A;

FIG. 15A is a cross sectional view similar to FIG. 14A, but with the clamping members retracted; and

FIG. 15B is a magnified isometric view showing details of a portion of FIG. 15A.

Please add the following paragraphs after the paragraph ending on page 27, line 19 and before the paragraph beginning on page 27, line 20:

Referring to FIG. 12B, a notch 1236 is formed in the side 1212 of the latch member 1100. When the substrate clamping mechanism 1200 is in its clamping position as shown in FIG. 12B, the notch 1236 is positioned a predefined distance in a forward direction relative to the clamping member 1204 (as described

further below). A similar notch, which is not shown, is similarly positioned relative to the other clamping member 1204 associated with the latch member 1100 of FIG. 12B. Moreover, similar notches (not shown) are provided in the other latch member 1100 (FIG. 12A and FIG. 14A), and are similarly positioned relative to the clamping members 1204 associated with the other latch member 1100.

FIGS. 13A and 13B are views that are respectively similar to FIGS. 12A and 12B, but showing the substrate clamping mechanism 1200 in a released (non-clamping) condition. FIG. 13B is a magnified view showing details of a portion 1300 of FIG. 13A.

With reference to FIGS. 12A and 12B and FIGS. 13A and 13B, releasing of the clamping mechanism 1200 occurs as follows. A docking movement of the substrate carrier 112 is performed relative to the port 104 (FIG. 1). That is, the carrier housing 200 (represented by side wall 1104 in FIGS. 12B and 13B), the latch members 1100, the clamping members 1204 and the substrate 202 are moved together in the direction indicated by arrow 1302 in FIG. 12B. With reference to FIGS. 11 and 12B, during the docking movement, the finger 1112 of the latch member 1100 comes into contact with a stop (not shown) of a carrier opening mechanism (not shown). Accordingly, motion of the latch member 1100 in the direction indicated by the arrow 1302 is halted. The clamping member 1204 advances along the latch member 1100 until it reaches the notch 1236. A biasing arrangement such as the spring 1402 of FIGS. 14A and 14B may be employed to cause the clamping member 1204 to enter the notch 1236 so that the clamping member 1204 moves away from, and out of contact with, the substrate 202. All four of the clamping members 1204 (FIG. 12A) may move substantially simultaneously out of contact with the substrate 202 in a similar manner, thereby releasing the substrate 202 from clamping. (As an alternative to the above-

mentioned biasing arrangement, the clamping member 1204, and in particular the vertical leg 1208 thereof, may be coupled to the latch member 1100 by a tongue-in-groove arrangement or other similar arrangement so that the clamping member 1204 is drawn into the notch 1236 and away from the substrate 202.)

FIG. 14A is a cross sectional view of a substrate carrier 112a of FIGS. 1-3B, 8, and 11, or alternately substrate carrier 112b of FIGS. 4, substrate carrier 112c of FIGS. 5A-6B, and/or substrate carrier 112d of FIGS. 7A-7B; FIG. 14B is a magnified isometric view showing details of a portion 1404 of FIG. 14A, wherein the clamping members 1204 have a flat groove 1406 in the end 1408 of the horizontal leg 1206. As stated, other configurations may be employed to provide effective clamping of the substrate 202. As further shown in FIGS. 14A and 14B, the vertical leg 1208 of each clamping member 1204 is biased against the latch member 1100 (e.g., via a spring 1402 or another suitable biasing mechanism).

To protect the substrate 202 from damage due to contaminants generated by the latching mechanism 218 and/or due to contact between the substrate 202 and the clamping members 1204 (1) a membrane (e.g., a flexible membrane 1410, such as a diaphragm in FIG. 14B) may be employed to isolate the latching mechanism 218 from a clean substrate area 1412 of the substrate carrier 112a in which the substrate 202 is located (as shown in FIGS. 14A and 14B); and/or (2) the end 1408 of each clamping member 1204 may be provided with a "soft face" (not shown) for contacting the substrate 202 (as shown in FIG. 6A). For example, the flexible membrane 1410 may isolate the substrate 202 from all of the moving parts of the latching mechanism 218 that may generate particles (e.g., the latch member 1100, the clamping members 1204, the springs 1402, etc.). The flexible membrane 1410 and/or the soft face (not shown) may comprise, for example, a urethane, silicone, etc.

FIG. 15A is a cross sectional view similar to FIG. 14A, but with the clamping members 1204 retracted into the notches 1236 of each latch member 1100; FIG. 15B is a magnified isometric view showing details of a portion 1502 of FIG. 15A. As shown in FIGS. 15A-15B, as the substrate carrier 112a moves forward relative to each latch member 1100, the spring 1402 biases each clamping member 1204 against the latch 1100 so that each clamping member 1204 enters its respective notch 1236 by retracting away from the substrate 202 through aperture 1209 (FIG. 2C). The substrate 202 thereafter may be extracted from the substrate carrier 112a.